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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/545,267	04/07/2000	Jeffrey A. Frisco	59013	1947

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EXAMINER

HOYE, MICHAEL W

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 04/22/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/545,267	<b>Applicant(s)</b> FRISCO ET AL.	
	<b>Examiner</b> Michael W. Hoye	<b>Art Unit</b> 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) 1-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 32-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 April 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4</u> | 6) <input type="checkbox"/> Other:  |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to because item “41” in Fig. 13 should be --41’--. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the correct item numbers in Fig. 17 as described in the specification. Items “210, 211, 212, 215, 216, 217, 218, 219, 220, and 221” should be --220, 221, 222, 225, 226, 227, 228, 229, 230, and 231-- respectively. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters “210”, “212”, “216”, and “218” have been used to designate both elements in the flowchart of Fig. 16 and items of the schematic of Fig. 17 respectively. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: item 112 of Fig. 5, and items 222, 225, 226, 227, 228, 229, 230, 231 as previously mentioned above in ¶ 2. A proposed drawing correction or corrected drawings are required in reply to the Office action to

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avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: items 40', 138', 141', 148', 151', and 152' of Fig. 8; items 35', 41', 45', 50', 68', and 178' of Fig. 13; and item "221" which should be --231-- in Fig. 17 as described above. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### *Specification*

6. The disclosure is objected to because of the following informalities: on pg. 18, line 14, "Block 114" should be --block 112--; on line 15, after the words, "seating class" --block 114-- should be added; on pg. 28, line 34, "68" should be --68'--; on pg. 31, line 4, "30" should be --30'--; on line 12, "68" should be --68'--; and on pg. 32, line 4, "payment card 210" should be --220--. Appropriate correction is required.

#### *Election/Restrictions*

7. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-31, drawn to a satellite television receiver, for providing signals to plural subsequent receivers, comprising a processor for determining an undesired

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condition and generating a substitute image on video displays, classified in class 725, subclass 71.

II. Claims 32-47, drawn to a satellite television receiver comprising a moving map image generator, classified in class 725, subclass 68.

8. The inventions are distinct, each from the other because:

Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention II has separate utility such as generating a flight information channel including a moving representation of the aircraft position on a map image. See MPEP § 806.05(d).

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for Group II is not required for Group I, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

9. During a telephone conversation with Christopher F. Regan on 4/11/03 a provisional election was made without traverse to prosecute the invention of Group II, claims 32-47.

Affirmation of this election must be made by applicant in replying to this Office action. Claims

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1-31 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 32-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sklar et al (USPN 5,990,928), in view of Galipeau et al (USPN 6,249,913), both cited by the examiner.

As to claim 32, note the Sklar et al reference which discloses an aircraft in-flight entertainment (AIFE) system. The claimed satellite television (TV) receiver is met by switching/receiver/decoder (SRD) 40 which further comprises receiver/decoder unit 42 as shown in Fig. 2. The claimed at least one passenger video display connected to said satellite TV receiver is met by passenger seat stations or terminals 56 as shown in Fig. 1 which inherently comprise a video display (see col. 7, line 57 – col. 8, line 16 and col. 9, lines 15-41). The claimed at least one passenger control unit is also met by the passenger terminals 56 which are

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associated with a respective passenger video display for permitting passenger selection of one of the programming channels for display (see col. 9, lines 26-52). The Sklar et al reference does not explicitly disclose a moving map image generator for generating a flight information channel including a moving representation of the aircraft position on a map image. The Galipeau et al reference discloses an aircraft in-flight entertainment and data management system. The Galipeau et al reference teaches that additional video programming may be provided to the passengers, including a map of the flight route with the aircraft superimposed over its present position (col. 11, lines 25-38). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the satellite TV receiver AIFE system that generates a plurality of channels of Sklar et al with the moving map image generator flight information channel that includes a representation of the aircraft position on a map image as taught by Galipeau et al. One of ordinary skill in the art would have been led to make such a modification since it would further enhance a satellite TV receiver AIFE system to further include a moving map image generator flight information channel along with the satellite TV and other channels already included in the AIFE system, which would bring additional satisfaction and enjoyment to the passengers who desire to know additional information about the aircraft flight.

As to claim 33, the Sklar et al reference further discloses the claimed AIFE system wherein said satellite TV receiver is a direct broadcast satellite (DBS) receiver (col. 5, lines 59-65).

As to claim 34, the Sklar et al reference discloses a processor for determining an aircraft position during flight as described in col. 8, lines 29-61, where a GPS control device may be

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implemented. The Galipeau et al reference as combined above incorporating the claimed moving map image generator further discloses the claimed said moving map image generator comprises a processor for determining an aircraft position during flight as shown by airplane systems 198 and network controller 186 in Fig. 12, which inherently comprises a processor for determining position as included with the airplane systems 198 in the figure (col. 11, lines 25-38).

As to claim 35, the Sklar et al reference discloses the claimed AIFE system further comprising a global positioning system (GPS) receiver connected to said processor for determining the aircraft position (col. 8, lines 29-61).

As to claim 36, the Sklar et al reference discloses the claimed AIFE system further comprising a steerable antenna connected to said satellite TV receiver as shown in Figs. 1 and 2 by "tracking" satellite antenna 38 (col. 8, lines 13-15, 20-67). The claimed steering of said steerable antenna is based upon signals from said GPS receiver and is met as described by the antenna controller 46 in Fig. 2 is coupled to the GPS system (col. 8, lines 37-38), and the antenna controller continually adjusts the antenna pointing direction due to the flight of the aircraft (col. 8, lines 45-49 and 29-21).

As to claim 37, the Sklar et al reference discloses the claimed AIFE system wherein said processor determines aircraft direction or heading (col. 8, line 61), altitude (col. 8, line 61), and aircraft speed (col. 11, line 11). The Galipeau et al reference as combined above incorporating the claimed moving map image generator also further discloses the claimed aircraft direction, speed, and altitude as shown by the heading, airspeed, and altitude within the airplane systems 198 of Fig. 12 for use with the map image.



As to claim 38, the Sklar et al reference discloses the claimed AIFE system wherein said at least one passenger video display comprises a plurality of seatback video displays as shown by the plurality of passenger seat terminals 56 in Fig. 1.

As to claim 39, the Sklar et al reference discloses the claimed plurality of signal distribution devices as shown by the headend 52 in Fig. 1 (col. 7, line 57 – col. 8, line 16), which inherently includes a plurality of distribution devices. The claimed cable network is met by the signal distribution network 54 as shown in Fig. 1 (see col. 7, lines 57-65, also see col. 9, lines 15-52). The Sklar et al reference does not explicitly disclose a plurality of signal distribution devices within the cable network connecting said satellite TV receiver to said signal distribution devices and connected said signal distribution devices to said passenger video displays.

However, the examiner takes Official Notice that it is notoriously well known in the art of AIFE systems to use a plurality of signal distribution devices for the advantage of distributing all of the signals to the intended video displays, etc... while maintaining exceptional signal quality and integrity. Therefore, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to include a plurality of signal distribution devices within the cable network for the advantages given above. The claimed said moving map image generator connected to said signal distribution devices is met in the combination of the Sklar et al and Galipeau et al references as described above in claim 32.

As to claim 40, the Sklar et al reference discloses an AIFE system as previously described above. The Sklar et al reference does not explicitly disclose that the aircraft is a narrow-body aircraft having a single passenger aisle. However, the examiner takes Official Notice that it is notoriously well known in the art of AIFE systems to use particular types of

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AIFE systems for narrow-body aircraft having a single passenger aisle for the advantage of taking into account space limitations that are not as critical in larger aircraft where the amount of space available is much greater for installing a distribution network, as one example. Therefore, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to use the AIFE system in a narrow-body aircraft having a single aisle for the advantage given above.

As to claim 41, note the Sklar et al reference which discloses a method for operating an aircraft in-flight entertainment (AIFE) system. The claimed satellite television (TV) receiver is met by switching/receiver/decoder (SRD) 40 which further comprises receiver/decoder unit 42 as shown in Fig. 2. The claimed at least one passenger video display connected to said satellite TV receiver is met by passenger seat stations or terminals 56 as shown in Fig. 1 which inherently comprise a video display (see col. 7, line 57 – col. 8, line 16 and col. 9, lines 15-41). The claimed at least one passenger control unit is also met by the passenger terminals 56 which are associated with a respective passenger video display for permitting passenger selection of one of the programming channels for display (see col. 9, lines 26-52). The Sklar et al reference does not explicitly disclose generating a flight information channel including a moving representation of the aircraft position on a map image. The Galipeau et al reference discloses an aircraft in-flight entertainment and data management system. The Galipeau et al reference teaches that additional video programming may be provided to the passengers, including a map of the flight route with the aircraft superimposed over its present position (col. 11, lines 25-38), and the reference also teaches permitting passenger selection of the channel on a video display using a passenger control unit (see col. 7, lines 19-27 & 42-54). Therefore, it would have been obvious

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to one of ordinary skill in the art at the time the invention was made to have combined the method for operating a satellite TV receiver AIFE system comprising a plurality of channels of Sklar et al with the moving map image generator flight information channel that includes a representation of the aircraft position on a map image as taught by Galipeau et al. One of ordinary skill in the art would have been led to make such a modification to the method since it would further enhance a satellite TV receiver AIFE system to further include a moving map image generator flight information channel along with the satellite TV and other channels already included in the AIFE system, which would bring additional satisfaction and enjoyment to the passengers who desire to know additional information about the aircraft flight through their own selection of the channel.

As to claim 42, the claimed method is rejected based claim 33.

As to claim 43, the Sklar et al reference discloses a method for determining an aircraft position during flight as described in col. 8, lines 29-61, where a GPS control device may be implemented. The Galipeau et al reference as combined above incorporating the claimed flight information channel further discloses the claimed determining the aircraft position during flight as shown by airplane systems 198 and network controller 186 in Fig. 12, which inherently comprises a processor for determining position as included with the airplane systems 198 in the figure (col. 11, lines 25-38), which is incorporated into the information channel.

As to claim 44, the Sklar et al reference discloses the claimed method of determining direction or heading (col. 8, line 61), altitude (col. 8, line 61), and aircraft speed (col. 11, line 11) through the processor. The Galipeau et al reference as combined above incorporating the claimed method of generating the flight information channel further discloses the claimed

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determining aircraft direction, speed, and altitude as shown by the heading, airspeed, and altitude within the airplane systems 198 of Fig. 12 for use with the map image.

As to claim 45, the Sklar et al reference discloses the claimed method wherein the AIFE system further comprises a global positioning system (GPS) receiver for determining the aircraft position (col. 8, lines 29-61). The GPS receiver signals of the Sklar et al reference would be beneficial for the combination with the Galipeau et al reference as described above for generating the flight information channel and determining the aircraft position using the GPS signals received.

As to claim 46, the claimed method is rejected based claim 38.

As to claim 47, the claimed method is rejected based claim 40.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Miller et al (USPN 6,507,952) – Discloses an in-flight passenger entertainment system that provides live video/audio programming to passengers and operators over an aircraft video/audio distribution system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael W. Hoyer whose telephone number is (703) 305-6954. The examiner can normally be reached on Monday to Friday from 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at (703) 305-4795.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231


**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Michael W. Hoyer  
April 15, 2003

  
JOHN MILLER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600